



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,777	11/12/2003	Terrence W. Schmidt	1934-7-3	7411

7590 11/28/2006

Bryan A. Santarelli  
GRAYBEAL JACKSON HALEY LLP  
Suite 350  
155 - 108th Avenue NE  
Bellevue, WA 98004-5901

EXAMINER

VASUDEVA, AJAY

ART UNIT	PAPER NUMBER
----------	--------------

3617

DATE MAILED: 11/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/712,777	<b>Applicant(s)</b> SCHMIDT ET AL.	
	<b>Examiner</b> Ajay Vasudeva	<b>Art Unit</b> 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 18-25, 28 and 31-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 18-25, 28 and 31-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8, 18, 19-25, 28 and 31-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Laukien (US 4,615,292 A).

Re claims 1, 18 and 19, Laukien shows a vessel with a bay disposed in a frame (figure 3). The bay is operable to receive a mission module [37] in the form of a submersible craft. The chamber [15] outlet, together with the hoist [18], forms an interface that is operable to be coupled between the frame and the mission module (see col. 7, lines 17-36). The vessel is capable of operating at different draft -- ranging from partial to a deep submergence (col. 3, lines 5-8) -- wherein the shallow draft could be less than nine feet (logistic mode), while the deeper draft could be between twelve and twenty feet (SWATH mode).

Re claims 8, 36 and 38, the vessel is a twin-hulled vessel in a semi-submerged mode. Re claims 37 and 39, when the vessel is in a completely submerged mode, it is considered to have a mono-hull structure because the entire hull forms a single submerged structure.

Re claim 3-7, the interface is capable of allowing a physically transfer of fuel, water, electrical power or telecommunication equipment between the vessel and the module. Therefore, the interface is considered as operable to facilitate the exchange of fuel, water etc. between the frame and the module.

Re claims 20-25, 32 and 40, the limitation "mission module is configured to" has been interpreted to mean "mission module is capable of". Re claims 20 and 21, the submersible craft of Laukien is considered as capable of anti-mine and anti-submarine warfare operations. Applicant may note that claims 20 and 21 do not require any specific structural limitation critical to the anti-mine and anti-submarine warfare, and are merely recite a function relating to an anti-mine and anti-submarine warfare. Further, regarding claims 24 and 25, the module is considered as capable of intercepting another boat, and/or to perform surveillance function.

As noted in the previous Office action, the claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function (see MPEP 2114). If the prior art discloses all claimed structural limitations and is capable of performing the recited function, it meets the requirements of the claim.

Also, the independent claims 1 and 18 are subcombination claims directed to a vessel, and do not positively recite a combination with a mission module. It is noted that the limitations "**operable to receive a mission module**" is merely an intended use limitation, and has been broadly interpreted to mean "*capable of receiving a mission module*". In the instant case, the vessel is considered as capable of receiving a mission module, and therefore meets the requirements of the claims. Further, any structural and/or functional characteristic attributable to the mission module is immaterial and carries no patentable weight because the claims do not claim a mission module.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-8, 18, 19-25, 28 and 31-43 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

4. The prior art made of record in the attached PTO Form 892, but not yet relied upon, is considered pertinent to applicant's disclosure.

Cushing et al. (US '681) and Vienna (US '721) each shows a mono-hulled and semi-submersible vessel.

France '466 shows a semi-submersible vessel.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Art Unit: 3617

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay Vasudeva whose telephone number is (571) 272-6689. The examiner can normally be reached on Monday-Friday 12:00 -- 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano can be reached on (571) 272-6684.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ajay Vasudeva  
Examiner  
Art Unit 3617

  
AJAY VASUDEVA  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 3600  
11/25/06